

### Abstract of the Disclosure

Provided are an apparatus and method for precisely processing an input signal by detecting the frequency characteristic of the signal and applying the detection result in an image signal processing block to reduce noise in the signal or enhance the details of the signal. The apparatus includes an indication value calculator, a level selector, and a frequency characteristic determination unit. Accordingly, the frequency distribution of an input signal is analyzed, and the signal is filtered by adjusting its filtering frequency band based on the analyzed frequency characteristic. Thus, it is possible to appropriately filter a signal using only a filter regardless of the resolution of the signal. In particular, noise in the signals of different scale ratios can be reduced or the details of the signal can be enhanced by processing the signals by only a filter.